



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: EL GAMAL et al. Examiner: Unknown  
Serial No.: 10/663,935 Group Art Unit: 2877  
Filed: Sept. 16, 2003 Docket No.: STFD.039PA  
Title: BIOLOGICAL ANALYSIS ARRANGEMENT AND APPROACH  
THEREFOR

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence and the papers, as described hereinabove, are being deposited in the United States Postal Service, as first class mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on March 16, 2004.

By: *Kerry J. Ledin*  
Kelly J. Ledin

INFORMATION DISCLOSURE STATEMENT (37 C.F.R. §1.97(b))

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

With regard to the above-identified application, the items of information listed on the enclosed Form 1449 are brought to the attention of the Examiner.

This statement should be considered because it is submitted either within three months of the filing date or before the first Office Action of the above-identified application. Accordingly, no fee is due for consideration of the items listed on the enclosed Form 1449.

Applicant would like to bring to the attention of the Examiner the following references, which were mentioned in the underlying provisional application:

1. El Gamal, A., Yang, D., and Fowler, B., *Pixel Level Processing -- Why, What and How?*, Proceedings of the SPIE Electronic Imaging '99 Conference, pp. 3650 (1999).
2. Fossum E., *Active Pixel Sensors: Are CCD's Dinosaurs*, Proceedings of SPIE 1900, pp. 2-14 (1993)
3. Holst, G., *CCD Arrays, Cameras, and Displays*, Second Edition, SPIE Press (1991).

4. Kleinfelder, S., Lim, S., Liu, X., and El Gamal, A., *A 10,000 Frames/s 0.18  $\mu$ m CMOS Digital Pixel Sensor with Pixel-Level Memory*, In Proceedings of the 2001 IEEE International Solid-State Circuits Conference, pp. 88-89 (2001).
5. X. Liu and A. El Gamal, *Photocurrent Estimation for a Self-Reset CMOS Image Sensor*, to appear in Proceedings of the SPIE Electronic Imaging 2002 Conference, San Jose, (Jan. 2002).
6. Yang, D., El Gamal, A., Fowler, B., and Tian, H., A 640x512 CMOS Image Sensor with Ultrawide Dynamic Range Floating-Point Pixel-Level ADC, In IEEE Journal of Solid State Circuits 34, pp. 1821-1834 (1999).
7. Salama, K., Eltoukhy, H., and Hassibi, A., *Modeling and Simulation of Integrated Pyrosequencing Detection System*, Proceedings of International Symposium on BIOS 2003: Biomedical Optics (Jan. 2003).
8. Ronashi, M., Uhlen, M., and Nyren, P., *A Sequencing Method Based on Real-Time Pyrophosphate*, Science 281, pp. 363-365 (1998).

In accordance with 37 C.F.R. §1.98(a)(2), and the 05 August 2003 Official Gazette

Notice, only a copy of each foreign document or non-U.S. patent/application listed on the enclosed Form 1449 is provided.

Please note that any notations or markings on the attached documents do not reflect particular relevance, or lack thereof, to the present application, nor were they necessarily made by anyone affiliated with the prosecution of the present application.

No representation is made that a reference is "prior art" within the meaning of 35 U.S.C. §§ 102 and 103 and Applicants reserve the right, pursuant to 37 C.F.R. § 1.131 or otherwise, to establish that the reference(s) are not "prior art." Moreover, Applicants do not represent that a reference has been thoroughly reviewed or that any relevance of any portion of a reference is intended.

Consideration of the items listed is respectfully requested. Pursuant to the provisions of M.P.E.P. 609, it is requested that the Examiner return a copy of the attached Form 1449, marked

as being considered and initialed by the Examiner, to the undersigned with the next official communication.

Respectfully submitted,

Crawford Maunu PLLC  
1270 Northland Drive  
Suite 390  
St. Paul, MN 55120  
651/686-6633

Date: March 11, 2004

By: 

Robert J. Crawford  
Reg. No. 32,122

<b>FORM 1449*</b> <b>INFORMATION DISCLOSURE STATEMENT</b> <b>IN AN APPLICATION</b> <small>(Use several sheets if necessary)</small>			Docket Number: STFD.039PA	Application Number: 10/663,935
			Applicant: El Gamal et al.	
			Filing Date: 09/16/03	Group Art Unit: 2877

U.S. PATENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,461,425	10/24/1995	Fowler et al.			
	5,603,351	2/18/1997	Cherukuri et al.			
	5,801,657	9/01/1998	Fowler et al.			
	5,846,708	12/08/1998	Hollis et al.			
	5,965,452	10/12/1999	Kovacs			
	6,040,138	3/21/2000	Lockhart et al.			
	6,210,891	4/03/2001	Nyren et al.			
	6,258,568	7/10/2001	Nyren			
	6,274,320	8/14/2001	Rothberg et al.			
	6,310,571	10/30/2001	Yang et al.			
	6,379,897	4/30/2002	Weidenhammer et al.			
	6,380,880	4/30/2002	Bidermann			
	6,440,722	8/27/2002	Knapp et al.			
	US 2002/0051971 A1	5/02/2002	Stuepnagel et al.			5/21/1999
FOREIGN PATENT DOCUMENTS						
	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
						YES

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**


EXAMINER	DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.	